

FIELDIANA • ZOOLOGY

Published by
CHICAGO NATURAL HISTORY MUSEUM

Volume 44

OCTOBER 22, 1965

No. 24

A New Species of Mole (Genus *Talpa*)

From Kurdistan Province, Western Iran

DOUGLAS M. LAY

DEPARTMENT OF ANATOMY, THE UNIVERSITY OF CHICAGO

In 1962 Dr. M. Baltazard, then director of the Institut Pasteur of Iran, generously donated a small but important collection of small mammals primarily from Iranian Kurdistan to the William S. and Janice Kergan Street Expedition of the Chicago Natural History Museum to Iran, 1962-63. A detailed treatment (Lay, in press) of this collection was integrated with the much larger one acquired by the Street Expedition. Of the genus *Talpa*, which is characterized by possession of 44 teeth, a series of six moles among the specimens donated by the Institut Pasteur represent a hitherto unrecognized species which is named and diagnosed below.

Talpa streeti new species

Type.—CNHM No. 96424, adult male, from Iran: Kurdistan Province: Hezar Darreh, latitude $35^{\circ} 25'$, longitude $47^{\circ} 07'$; collected during the period from 19 June to 20 July, 1953 by a field party of the Institut Pasteur de l'Iran, Tehran, headed by Dr. Mahmoud Bahmanyar. The type specimen consists of the headless body with skin attached preserved in alcohol, and the extracted, cleaned skull which is preserved dry.

Referred Material.—Five specimens CNHM Nos. 96420-96423 and 96425. The last four numbers are adult male specimens from the type locality preserved in alcohol with extracted skulls preserved dry. No. 96420 consists only of a skin that bears only Kurdistan as its locality and no date of collection.

Range.—Known only from the type locality in Kurdistan Province, Iran.

Library of Congress Catalog Card Number: 65-25104

No. 995

227

THE LIBRARY OF

MAY 2 1966

NATURAL HISTORY SURVEY

FEB 11 1966

LIBRARY

UNIVERSITY OF ILLINOIS

THE LIBRARY OF

MAY 10 1965

UNIVERSITY OF ILLINOIS

TABLE 1.—Measurements of Moles of the Genus *Talpa*

Species	Rostral length	Rostral breadth	Condylbasal length	Zygomastic breadth	Breadth of braincase	Length of M ¹⁻³	Ratio of condylobasal length to rostral breadth
<i>T. streeti</i>	s ¹	5	5	5	5	5	
	e ²	11.9-12.5	10.0-10.6	30.6-31.7	13.6-13.9	16.5-17.1	6.5-6.7
	m ³	12.3	10.4	31.0	13.7	16.8	2.9
<i>T. romana</i>	s	7	7	7	7	7	
	e	13.6-14.8	10.1-10.8	33.5-35.7	13.5-14.7	17.0-18.0	7.1-7.7
	m	14.3	10.6	34.7	14.2	17.8	7.4
<i>T. caeca</i>	s	5	5	5	4	4	
	e	10.3-11.2	8.2-8.9	28.2-29.4	11.6-12.3	14.9-15.5	5.9-6.5
	m	10.9	8.6	28.9	11.9	15.2	6.2
<i>T. europaea</i>	s	10	10	10	10	10	
	e	10.8-13.1	7.6-9.3	30.0-34.7	10.7-12.5	14.8-17.7	5.7-6.4
	m	11.7	8.2	31.8	11.8	16.1	6.0
<i>T. hercegovinensis</i> (measurements from Stein 1960, p. 28)	s	14	13	13	.....	.....
	e	11.1-12.1	6.3-7.7	26.3-28.1	.....	13.1-14.0	.....
	m	11.4	6.7	27.1	.....	13.4	.....
<i>T. micrura</i>	s	6	7	7	6	7	
	e	10.7-12.2	7.5-8.8	30.3-33.1	11.5-13.0	15.1-16.5	5.5-5.8
	m	11.4	8.3	31.3	12.4	15.8	5.6
<i>T. longirostris</i>	s	6	6	3	5	3	
	e	10.5-11.3	6.8-7.5	29.2, 29.6, 31.0	10.0-11.0	13.9, 14.3, 14.7	4.7-5.2
	m	10.9	7.1	avg.=29.9	10.4	avg.=14.3	5.1
<i>T. klossi</i>	s	2	2	1	1	1	
	e	10.5-11.0	7.6-7.8	30.9	10.6	14.5	5.2-5.5
	m	avg.=10.8	avg.=7.7	.....	.....	.....	avg.=5.4

¹ s=sample size; ² e=extremes; ³ m=mean; avg.=average (for samples of three or less)

Taxonomic description.—(1) Premolars 2 and 3 of maxillary and mandibular tooth rows conspicuously smaller than any other tooth in their respective row, I to M. (2) Rostrum, measured across the widest points of M^2 , is broad. Mean length and range are 10.36 (10.0–10.6) mm. (3) Upper molars (M^{1-3}) are long anteroposteriorly. Mean length and range are 6.6 (6.5–6.7) mm. (4) Ratio of mean rostrum breadth across M^2 to mean condylobasal length, is 2.9. (5) Zygoma is broad. Mean and extremes are 13.7 (13.6–13.9) mm. and relatively strong (zygoma measured at the suture of the jugal with the zygomatic process of temporal). (6) For breadth



FIG. 1. Skull of type specimen of the mole, *Talpa streeti*, upper left, dorsal view; lower left, ventral view; upper and lower right, lateral view. 2 \times .

of braincase, measured across greatest lateral expansions of parietal and temporal bones, mean and extremes are 16.8 (16.5–17.1) mm. (7) Palm of manus unusually broadened; claws attached to terminal phalanges of all five digits broad and rounded at tips, and in cross-section presenting an oval shape that is flattened ventrally.

Diagnosis.—*Talpa streeti* is distinguished from other Palaearctic species of the genus *Talpa* by the above enumerated characters as follows: from *T. romana* by 1, 4; from *T. caeca* by 1, 2, 4, 5, 6, 7; from *T. europaea* by 1, 4, 5; from *T. hercegovinensis* by 2, 4, 6 (and possibly 1, 3, 5, 7 but specimens have not been available for direct comparison); from *T. micrura* by 1, 2, 3, 4, 5, 7; from *T. longirostris* by 1, 2, 3, 4, 5, 6, 7; from *T. klossi* by 1, 2, 3, 4, 5, 6, 7.

The diagnosis was composed by study and measurement of the following specimens in which these abbreviations are used: USNM—United States National Museum, CNHM—Chicago Natural History Museum, IRSNB—Institut royal des Sciences naturelles de Belgique.

Material examined from other species.—*Talpa romana*, 7; USNM 152145–49, 152376 Italy: Rome and 152150 Italy: Maccarese. *Talpa caeca*, 7; CNHM 82136–7 Turkey: Bitlis Prov.: Tatvan; CNHM 96416–19 Iran: Ghilan Province: 12 km. W. Chalus; IRSNB 12271 Iran: Ghilan Prov.: Khomam. *Talpa europaea*, 10; CNHM 6439, 6442 Switzerland: Andermatt; CNHM 23518, 23520–21, 23523 W. Germany: Augsburg; CNHM 48499–50 Czechoslovakia: Bohemia Province: Kardasova Recice; CNHM 65381–82 Austria: Nieder-Osterreich: Petronell and Auern bei St. Polten, respectively. *Talpa micrura*, 7; CNHM 35405–6 India: Sikkim: Tista Valley and Jeluk respectively, 35407, 35409 Bengal Province: Mangpu; 82580–82 E. Himalaya Province: Gopaldhara. *Talpa longirostris*, 6; CNHM 37012 Szechwan: Mouping; 45092 Goan Shih Dive; 45904 Chou Tsen Goh; CNHM 38994–6 N. Viet Nam: Tonkin Prov.: Chapa. *Talpa klossi*, 2; CNHM 37821–2 Laos: Thateng.

The author takes pleasure in naming this species in honor of William S. and Janice Kergan Street.

REFERENCES

LAY, DOUGLAS M.

(In press) A study of the mammals of Iran, resulting from the Street Expedition of 1962–63. *Fieldiana: Zoology*.

STEIN, G. H. W.

1960. Schadelallometrien und systematik bei altweltlichen maulwürfen (*Talpinae*) *Mitt. Zool. Mus. Berlin* 36, No. 1, pp. 1–48.